

Title (en)
Convoluted plate with vortex generator.

Title (de)
Gebogene Platte mit Wirbelgenerator.

Title (fr)
Plaque repliée avec générateur de tourbillon.

Publication
EP 0321379 A2 19890621 (EN)

Application
EP 88630118 A 19880630

Priority
US 13239587 A 19871215

Abstract (en)
A thin, convoluted wall member (314) disposed upstream of the inlet (312) of a diffuser (304) generates large-scale vortices (322) having axes in the downstream direction. The vortices (322) enhance mixing within the diffuser (304) and can also energize the boundary layer, thereby improving diffuser performance and delaying the onset of stall. Greater diffusion angles without stall are possible. The member (314) itself creates low losses.

IPC 1-7
F01N 3/28; F15D 1/00

IPC 8 full level
F15D 1/02 (2006.01); **B01D 53/86** (2006.01); **B01F 5/06** (2006.01); **B01J 8/02** (2006.01); **F01N 3/28** (2006.01); **F15D 1/00** (2006.01); **F28F 13/06** (2006.01); **B01F 5/00** (2006.01)

CPC (source: EP KR)
B01F 25/4322 (2022.01 - EP); **F01N 3/2892** (2013.01 - EP); **F15D 1/00** (2013.01 - KR); **F15D 1/0015** (2013.01 - EP); **F28F 13/06** (2013.01 - EP); **B01F 2025/913** (2022.01 - EP)

Cited by
EP0410924A3; EP0585194A1; US5918465A; US5230369A; EP0493302A1; RU2692058C1; US5327940A; US2012128540A1; US9132391B2; EP0439226A1; EP2522911A1; EP2522912A1; EP0926356A3; EP0999367A1; US2011135541A1; DE102012221342A1; US8840843B2; US8938971B2; US6216644B1; WO9623981A1; US9347663B2

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EP 88630118 A 19880630; DE 3853466 T 19880630; DE 88630118 T 19880630; JP 16406988 A 19880630; KR 880008196 A 19880630; YU 111888 A 19880609